ELSEVIER

Respiration Physiology 110 (1997) 323–324

RESPIRATION PHYSIOLOGY

Contents of Volume 110

No. 1, October 1997

Research Articles

J.-P. Praud, V. Diaz, I. Kianicka, J.-Y. Chevalier, E. Canet and Y. Thisdale (Canada) Abolition of breathing rhythmicity in lambs by CO_2 unloading in the first hours of life 1

P.R.M. Rocco, D.S. Faffe, M. Feijóo, S.L. Menezes, F.P. Vasconcellos and W.A. Zin (Brazil) Effects of uni- and bilateral phrenicotomy on active and passive respiratory mechanics in rats 9

S. Ganesan, C.-S. Man and S.J. Lai-Fook (USA) Generation and detection of lung stress waves from the chest surface 19

M.S. Badr, A. Kawak, J.B. Skatrud, M.J. Morrell, B.R. Zahn and M.A. Babcock (USA) Effect of induced hypocapnic hypopnea on upper airway patency in humans during NREM sleep 33

J.C. Cruz, D.-R. Jeng, D. Han, G. Wu and X.F. Flores (USA) Ventilation inhomogeneities and mixed venous blood N_2 in multibreath N_2 washout 47

X. Ma and N.L. Stephens (Canada) The cytoskeleton and the extracellular matrix in sensitized canine tracheal smooth muscle 57

Corrigendum 67

Nos. 2,3 November 1997

Special Issue: Neural Control of Breathing: Molecular to Organismal Perspectives.
Guest Editor: G. Mitchell

Foreword 69

Research articles

J.M. Ramirez, P. Telgkamp, F.P. Elsen, U.J.A. Quellmalz and D.W. Richter (USA, Germany) Respiratory rhythm generation in mammals: synaptic and membrane properties 71

D. Beitner-Johnson, G.E. Shull, J.R. Dedman and D.E. Millhorn (USA) Regulation of gene expression by hypoxia: A molecular approach 87

M.F. Czyzyk-Krzeska (USA) Molecular aspects of oxygen sensing in physiological adaptation to hypoxia 99

D.W. Richter, P.M. Lalley, O. Pierrefiche, A. Haji, A.M. Bischoff, B. Wilken and F. Hanefeld (Germany, USA, Japan) Intracellular signal pathways controlling respiratory neurons 113

G.D. Funk, M.A. Parkis, S.R. Selvaratnam and C. Walsh (New Zealand) Developmental modulation of glutamatergic inspiratory drive to hypoglossal motoneurons 125

D.A. Bayliss, F. Viana, E.M. Talley and A.J. Berger (USA) Neuromodulation of hypoglossal motoneurons: cellular and developmental mechanisms 139

Okabe, M. Mackiewicz and L. Kubin (USA) Serotonin receptor mRNA expression in the hypoglossal motor nucleus 151

D.R. McCrimmon, E.J. Zuperku, F. Hayashi, Z. Dogas, C.F.L. Hinrichsen, E.A. Stuth, M. Tonkovic-Capin, M. Krolo and F.A. Hopp (USA) Modulation of the synaptic drive to respiratory premotor and motor neurons 161

J.S. Erlichman and J.C. Leiter (USA) Comparative aspects of central CO_2 chemoreception 177

H.V. Forster, P.J. Ohtake, L.G. Pan and T.F. Lowry (USA) Effect on breathing of surface ventrolateral medullary cooling in awake, anesthetized and asleep goats 187

S.A. Shea (USA) Life without ventilatory chemosensitivity 199

0034-5687/97/$17.00 © 1997 Elsevier Science B.V. All rights reserved.
PII S0034-5687(97)00071-6

D.F. Donnelly (USA) Are oxygen dependent K^+ channels essential for carotid body chemo-transduction? 211
E.M. Horn and T.G. Waldrop (USA) Oxygen-sensing neurons in the caudal hypothalamus and their role in cardiorespiratory control 219
S.W. Mifflin (USA) Short-term potentiation of carotid sinus nerve inputs to neurons in the nucleus of the solitary tract 229
E.N. Bruce (USA) Chemoreflex and vagal afferent mechanisms enhance breath to breath variability of breathing 237
V. Borday, G. Fortin and J. Champagnat (France) Early ontogeny of rhythm generation and control of breathing 245
G.L. Ackland, R. Noble and M.A. Hanson (UK) Red nucleus inhibits breathing during hypoxia in neonates 251
L. Ling, E.B. Olson, Jr., E.H. Vidruk and G.S. Mitchell (USA) Developmental plasticity of the hypoxic ventilatory response 261
K.P. Strohl and A.J. Thomas (USA) Neonatal conditioning for adult respiratory behavior 269
D.L. Turner, K.B. Bach, P.A. Martin, E.B. Olsen, M. Brownfield, K.T. Foley and G.S. Mitchell (UK, USA) Modulation of ventilatory control during exercise 277
D.M. Ainsworth, C.A. Smith, S.W. Eicker, N.G. Ducharme, K.S. Henderson, K. Snedden and J.A. Dempsey (USA) Pulmonary-locomotory interactions in exercising dogs and horses 287
R.F. Fregosi and D.D. Fuller (USA) Respiratory-related control of extrinsic tongue muscle activity 295
W.K. Milsom, M.B. Harris and S.G. Reid (Canada) Do descending influences alternate to produce episodic breathing? 307

Author Index 319

Subject Index 321

Contents of Volume 110 323

V. Borday, G. Fortin and J. Champagnat (France) Early ontogeny of rhythm generation and control of breathing 245
G.L. Ackland, R. Noble and M.A. Hanson (UK) Red nucleus inhibits breathing during hypoxia in neonates 251
L. Ling, E.B. Olson, Jr., E.H. Vidruk and G.S. Mitchell (USA) Developmental plasticity of the hypoxic ventilatory response 261
K.P. Strohl and A.J. Thomas (USA) Neonatal conditioning for adult respiratory behavior 269
D.L. Turner, K.B. Bach, P.A. Martin, E.B. Olsen, M. Brownfield, K.T. Foley and G.S. Mitchell (UK, USA) Modulation of ventilatory control during exercise 277
D.M. Ainsworth, C.A. Smith, S.W. Eicker, N.G. Ducharme, K.S. Henderson, K. Snedden and J.A. Dempsey (USA) Pulmonary-locomotory interactions in exercising dogs and horses 287
R.F. Fregosi and D.D. Fuller (USA) Respiratory-related control of extrinsic tongue muscle activity 295
W.K. Milsom, M.B. Harris and S.G. Reid (Canada) Do descending influences alternate to produce episodic breathing? 307

Author index 319

Subject index 321

Contents of Volume 110 323